SAILING DIRECTIONS CORRECTIONS

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Page 3—Line 12/L; insert after: **Submarine Operating Areas**(NIMA)

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Page 24—Line 44/R; insert after:

Quarantine

The Australian Quarantine and Inspection Service (AQIS) currently requires all vessels arriving in Australia from overseas, or who have been in contact with overseas vessels or sea installations, to submit a Quarantine Pre-Arrival Report (QPAR) to AQIS. Copies of the report can be accessed from the AQIS Seaports web site.

Austalian Quarantine and Inspection Service

http://www.aqis.gov.au/shipping

The QPAR destails the condition of the vessel, including human health, cargo, and ballast water management. The QPAR should be sent to AQIS no more than 48 hours and no less than 12 hours prior to arrival in Australia. This will allow efficient processing of the QPAR and avoid any disruption to the vessel's arrival. Vessels that do not submit a QPAR will not be given formal quarantine clearance to enter port.

Vessels require written permission to discharge any ballast water in Australian ports or waters. This permission may only be granted after the vessel has properly submitted a QPAR to AQIS.

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Page 29—Line 14/R; insert after:

Submarine Operating Areas

Australian submarines may be encountered by day or at night while operating in any of the waters off the Australian coast. Under certain circumstances, warnings that submarines are exercising in specified areas may be broadcast by local coastal radio stations.

Australian escort vessels fly the International Code Group "NE2" to denote that submarines, which may be submerged or surfaced, are exercising in the vicinity. Vessels are cautioned to give a wide berth to any vessel flying this signal.

It must not be inferred from the above that submarines exercise only when in the company of escorting vessels.

A submarine submerged in an exercise area at a depth too great to show the periscope may show the following pyrotechnic or smoke candle signals:

- 1. White smoke candles (with flame), yellow smoke candles, or yellow and green pyro flares indicate the submarine's position in response to a request from a ship or aircraft or as required.
- 2. Red pyro flares (may be accompanied by smoke candles repeated as often as possible) indicate that the submarine is carrying out emergency surfacing procedure.

Vessels should keep clear and must not stop their propellers. Vessels must also standby to render assistance.

If the red pyro flare signal is sighted and the submarine does not surface within 5 minutes, it should be assumed that the submarine is in distress and has sunk. An immediate attempt should be made to fix the position in which the signal was sighted.

White smoke candles burn for up to 15 minutes; they emit white smoke and flame and can be seen day and night. Caution is necessary as they can be easily confused with the smoke and flame of aircraft marine markers and floats.

Yellow smoke candles burn for about 5 minutes; they emit yellow smoke. They can be seen more easily in rough weather than the white smoke candles, but they cannot be seen at night.

Navigation Lights

Australian submarines have their masthead and side lights placed well forward and very low over the water in proportion to their length and tonnage. In particular, some submarines can only show a forward masthead light in calm confined waters. Other submarines may have the forward masthead light situated lower than the side lights. In addition, the main masthead light may be situated well forward of the midpoint of the submarine's length.

The stern light may be placed very low, and may, at times, be partially obscured by spray and wash. In some cases, the stern light will be well forward of the aft part of the submarine and will not give a true indication of the submarine's length. The stern lights are invariably situated lower than the side lights.

The aft anchor light of a nuclear submarine is mounted on the upper rudder which is some distance astern of the hull's surface waterline. Hence, care must be taken to avoid confusing the submarine with two separate vessels of less than 50m in length.

The overall arrangement of submarine lights is unusual and may well give the impression of markedly smaller and shorter vessels. Their vulnerability to collision when proceeding on the surface and the fact that some submarines are nuclear powered dictates particular caution when approaching such vessels.

Nearly all Australian submarines are fitted with an amber quick-flashing light situated 1 to 2m above the main steaming light. This additional light is for use as an aid to identification in narrow waters and areas of dense traffic. Australian submarines will normally exhibit this identification light under the above conditions and when entering or leaving a harbor at night.

Collins class submarines exhibit a very quick flashing yellow identification light (120 flashes per minute). This identification light should not be confused with an aircushioned vessel operating in a non-displacement mode, which displays the same light.

Sunken Submarine

A submarine which is bottomed and unable to surface will try to indicate its position by firing candles giving off yellow or white smoke, either on the approach of surface vessels or at regular intervals. Yellow candles will be used as much as possible by day.

It may be impossible for a submarine to fire smoke candles. Correspondingly, a partially-flooded submarine may have only a certain number of smoke candles available and searching ships should not therefore expect many to appear.

Since oil slicks or debris may be the only indication of the presence or whereabouts of the sunken submarine, it is vitally important that surface ships refrain from discharging anything which might appear to have come from a submarine while they are in the probability area. Searching ships and aircraft can waste many valuable hours in investigating these false contacts.

Some Australian submarine pyrotechnics can be fitted with message carriers. If a message has been attached, the pyrotechnic will be fitted with a dye marker, giving off a yellowish-green color on the surface. Such a pyrotechnic should be recovered as soon as it has finished burning.

Collins class submarines are fitted with a Submarine Launched EPIRB (SERB), which will be described later in this section.

In any submarine accident, time is the most vital factor affecting the chances of rescue of survivors, and, as the sighting of an indicator buoy may be the first intimation that an accident has in fact occurred, it is vital that no time should be lost in taking action. The sighting of any beacon should at once be reported by the quickest available means to the Rescue Coordination Centre Australia, the Navy, or the police. However, if vessels are unable to establish communications without leaving the vicinity of the submarine, it should be borne in mind that the primary consideration should be for vessels to remain standing by to rescue survivors and not leave the scene of the accident. Every effort should be made to include in the report the serial number of the beacon; this number is affixed on top of the SERB.

At any time after a submarine accident, survivors may start attempting to escape. Current policy dictates that survivors will wait before escaping, as follows:

- 1. Until rescue vessels are known to be standing by.
- 2. Conditions inside the submarine deteriorate to such an extent that an escape must be attempted.

It should be noted that, in certain circumstances, the latter situation may not arise through lack of air supply until several days after the accident. However, if the submarine is badly damaged, survivors may have to make an escape attempt immediately. Any ship finding a SERBN should not therefore leave the position but stand by well-clear ready to pick up survivors.

On arrival at the surface, crewmembers may be exhausted or ill, and, if circumstances permit, the presence of a boat already lowered is very desirable. Some crewmembers may require a recompression chamber. Therefore, it is the aim of the authorities to get such a chamber to the scene as soon as possible.

In order that those trapped in the submarine shall be made aware that help is at hand, naval vessels drop small charges into the sea which can be heard from inside the submarine. There is no objection to the use of small charges for this purpose, but it is vital that they are not dropped too close since crewmembers in the process of making ascents are particularly vulnerable to underwater explosions, and may easily receive fatal injuries. A distance of about 0.3 mile is considered to be safe.

If no small charges are available, the running of an echo sounder or the banging of the outer skin of the ship's hull with a hammer from a position below the waterline are likely to be heard in the submarine, and such banging and/or sounding should therefore be carried out at frequent intervals.

Submarine Emergency Radio Beacon (SERB)

The SERB is made of aluminum, colored orange, and is cylindrical in shape, with two whip aerials. The beacon is fitted with an automated transmitting unit, with a battery life of 48 hours, and operating on the following frequencies:

- a. 406.025 MHz—Cospas/Sarsat.
- b. 243 MHz—Military Air Guard.
- c. 121.5 MHz—Civil Air Guard.

Submarine Launched Expendable Communications Buoy (ECB)

This buoy is used for tactical communications between submarines and other warships/aircraft. It can, however, be fired in an emergency default mode, in which case it will transmit a SABRE tone on 243MHz Military Air Guard.

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